DEFINE

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Introduction

In this document we define our problem, by analyzing our research findings. Furthermore, you will find which tools and methods we are going to use. For deeper information read this document precisely.

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Problem definition

After doing the research, we found out that there wasn't a big problem but there are a lot of little things that the user doesn't like, for example that everything is written in English and when a user wants to take a picture the resolution isn't correct, there are couple more points for improvement, see Interview_wishes_and_needs.pdf. The consequence of this is that the system does not work properly. Due to these issues the work process gets halted, which gives users a bad experience.

Solutions

As a solution Brover wants a new app. Before we start with developing, we need to think about how we are going to make this a successful project. Are we going to build PWA (progressive web app) or a Native app? How are we going to the user experience? Which tools are we going to use? How are we going to test? These are the question we want to answer in this phase.

Create a PWA or Native app?

We discussed this with the supervisor, there are pros and cons for both options. PWA is very easy because no installation is required, has features of web and app and it has a strong foundation for further development. On the other side, the use of a hardware is limited. the client later wants to use the app to digitize the work process, they want to use NFC chips. In this case the native app is much better since it has more hardware support. This is the reason we chose to build a Native app.

Which tool are we going to use?

We are going to use multiple tools and methods, for planning, version control, development, documentation, communication etc.

Planning

For planning we want to work with Scrum, Zeliox already works with scrum. Therefore, we use Atlassian. This tool is perfect for planning, to keep an overview of our project and task division.

Version control

Zeliox already has an own GitLab repo where we can make use of. This is the same tool Fontys uses for version control. There was no reason for me to use another version control. As a tool to use our repo we used a build in tool in Visual studio code to push, pull commit etc. Sometimes we used GitHub desktop because it has a better interface.

Development

We thought about how we want to develop the app. Our company wanted to make this app in flutter since colleagues who had experience with flutter. This is nice for maintaining the app after my internship period. Furthermore, Flutter app can run on IOS as well as on Android this save up a lot of time.

Documentation

For documentation we used Word and overleaf. In first place our internship coordinator wants us to document our research in overleaf. The reason behind this was that research papers are also written with LaTeX, and you can use for example overleaf as a tool. The pro's about using overleaf is that you can make changes very quick, add links and it's very easy to reference to an asset.

Communication

For communication we use Slack. This is a common tool that is used within the company. Furthermore, we use WhatsApp as well. The important messages are communicated through Slack.

We use Atlassian to let our colleagues know what changes we have done on the app. This is done by commenting on the user story.

Quick summary

In the section below I will show a summary of the tools and method we use.

Planning

- Scrum
- Atlassian

Version control

- GitLab
- Visual studio code
- GitHub Desktop

Development

- Visual studio code
- Adobe XD
- Flutter

Documentation

- Word
- Overleaf (LaTeX)

Communication

- Slack
- WhatsApp
- Atlassian

How are we going to create a good user experience?

Design principles

After our research we know that there are lot of small problems which makes it a big problem. We can define these problems as bad user experience. We used design principles to improve the user experience, before using the design principle we compared various design principle which we found on https://principles.design/ and chose the best fitting to our needs.

We chose to use 20 Guiding Principles for Experience Design we have chosen this design principle because it fits well, we want to improve the user experience and in this design principle they explain very well what we should pay attention to. They look at user behavior and apply it well.

How are we going to test?

After doing some reading about user testing and usability testing, we found Maze through their website. With doing further research this was easy and a nice tool, ideal for user testing.

The main reason why we want to use Maze for the user testing. With Maze we can connect our adobe XD design and can create a scenario, users can go through the interactive design and its free. It also shows where the user has clicked these are the reason we chose for Maze.